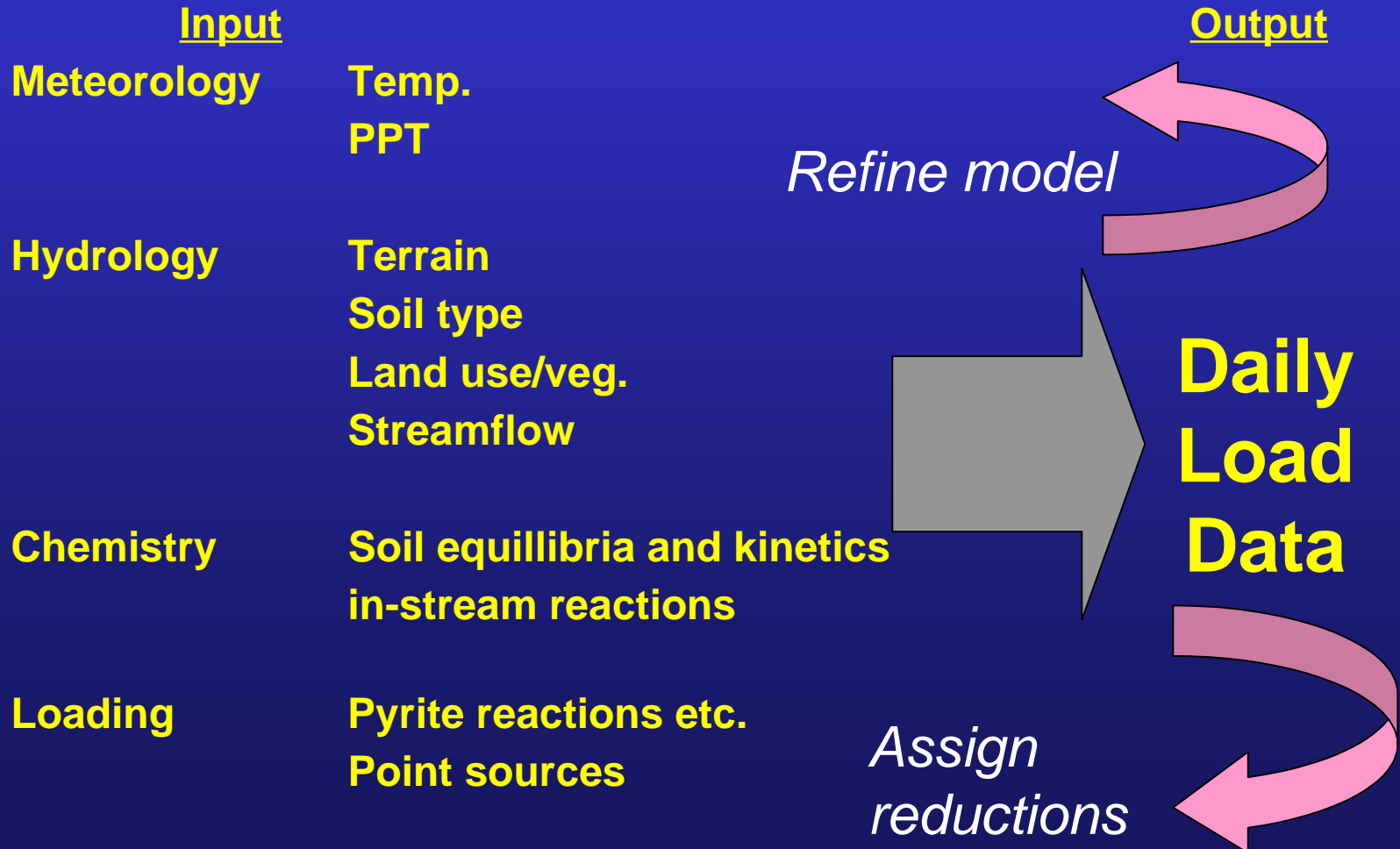


# Watershed Groups and TMDL data

*Case study: Deckers Creek*



# Data? Who has that?

## Stakeholder

## Good points

## Bad points

**State Agencies**

**Largest source  
Many sites  
Many parameters  
Some flow data**

**Not designed  
for TMDL**

**Permitted sources**

**should know  
loading**

**data for out-  
fall only**

**Watershed groups**

**Dedicated  
monitors**

**few data  
few flows**

**Downstream**

**Alliance**

**Watershed**

**Daily**

**Load**

**Experiment**

# Project goals

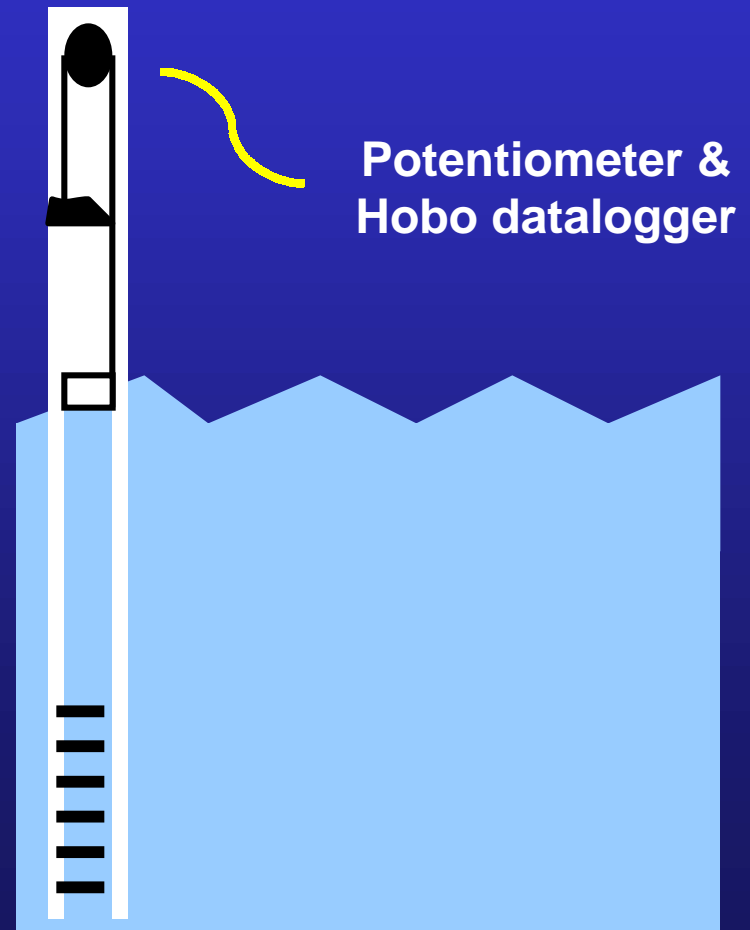
- Determine daily loads for
  - All 303(d) list pollutants in
  - 2 tribs to the Monongahela River for
  - 2 weeks each (one week of steady, one week of changing flow)
- Demonstrate ability of watershed groups to collect, summarize and share valid data for use in TMDL process

# Resources

- **Grant from Canaan Valley Institute**
- **Loan of an ISCO automated sampler (WVDEP office of water resources)**
- **Assistance in measuring streamflow (WVDEP stream restoration group)**

# The Plan

- Establish continuous gaging station
- Measure streamflow, develop rating curve
- Install ISCO
- Collect, preserve transport samples to certified lab
- Calculate loads
- Post results on website ([DeckersCreek.org](http://DeckersCreek.org)).



# First target: Deckers Creek

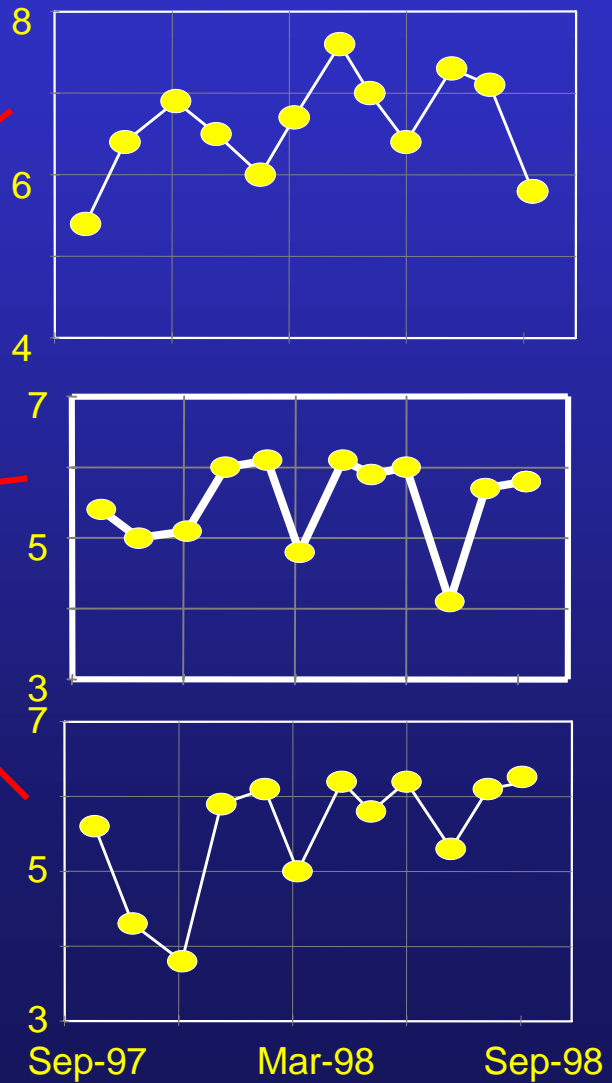
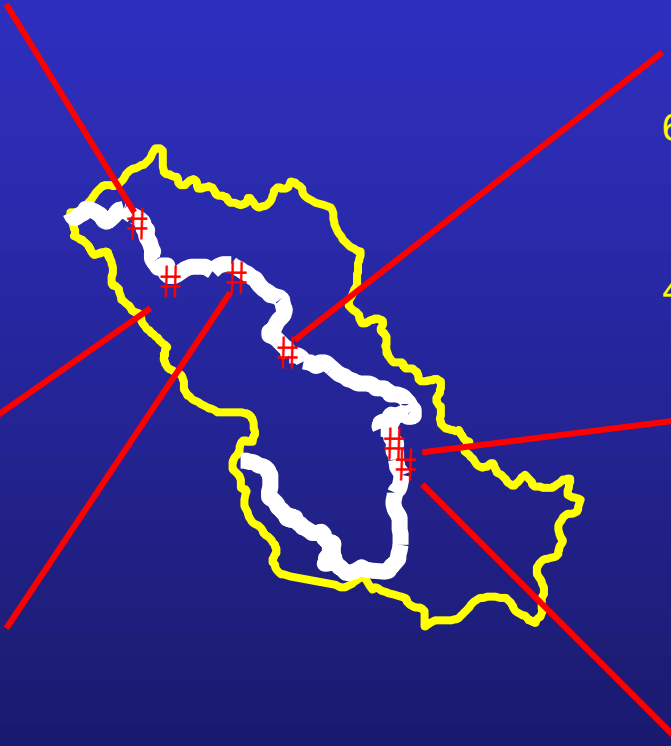
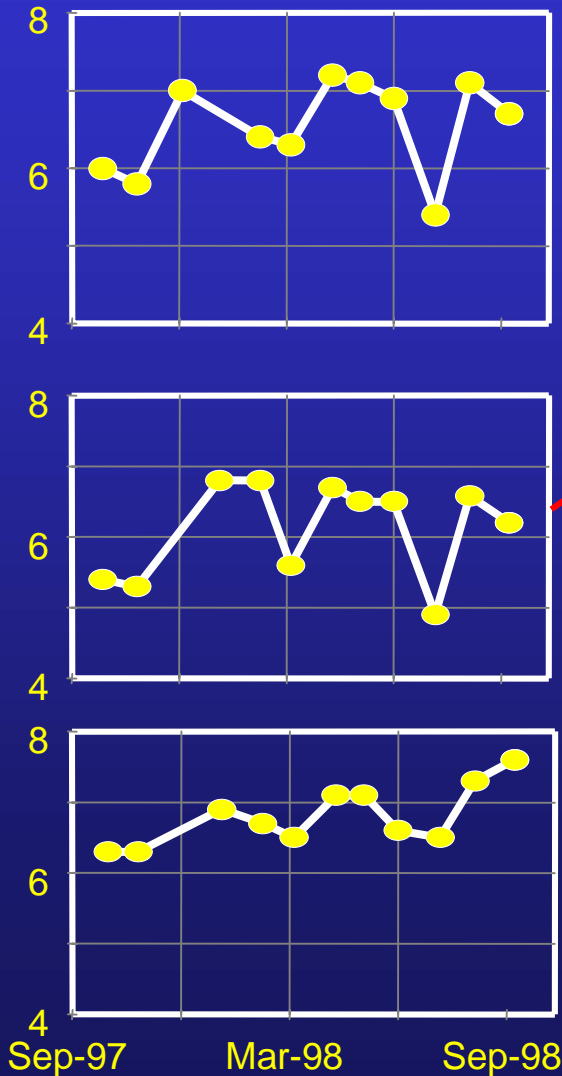


# Benthic Survey in Deckers Creek Watershed





# pH monitoring data in Deckers Creek



# Possible results of monitoring data

- Loading of acid and toxic metals may be too small to account for poor benthic communities, suggesting sediment or other problems.
- Acid pulses may account for poor benthic communities.
- 303(d) listing for metals may be incorrect, despite obvious impairment.

# Request for advice

- Someone get me a new acronym
- Are metals the right thing to monitor?
- Would  $\text{SO}_4^{2-}$  be more useful for “constraining” non-point sources?
- Other comments.